NFPA 25

Standard for the
Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems

2002 Edition

Changes for NFPA 25 Adopted and Amended in Title 19 Chapter 5

Origin and Development of NFPA 25

This is the California Edition of NFPA 25. It is based on the 2002 edition of NFPA 25 with amendments. The California amendments include inspection, testing, and maintenance frequencies and requirements contained in California Title 19 which are not included in NFPA 25.

NOTICE:

Information on referenced publications can be found in Chapter 2 and Annex ~~D~~ E.

2.2 NFPA Publications.

NFPA 15, *Standard for Water Spray Fixed Systems for Fire Protection*, ~~2001~~ 1996 edition.

3.3.20 Inspection, Testing, and Maintenance Service. A service program provided by:

(a) a qualified California Contractors State Licensing Board Licensed Fire Protection Contractor (C-16) ~~contractor~~,

(b) a qualified California State Fire Marshal Licensed A (Type 1, Type 2, or Type 3) Concern, or

(c) a qualified owner's representative as permitted under California Title 19 Chapter 5, Paragraph 904.1(a)

in which all components unique to the property's systems are inspected and tested at the required times and necessary maintenance is provided. This program includes logging and retention of relevant records.

3.6.7 Standpipe System. See Section 3.3.33 and Section 3.3.5.

4.1.4* The owner or occupant shall promptly correct or repair deficiencies, damaged parts, or impairments found while performing the inspection, test, and maintenance requirements of this

standard. Recalled products shall be replaced or remedied. Such replacement or remedial product shall be installed in accordance with the listing requirements, the manufacturer's instructions and the appropriate NFPA installation standards. A recalled product is a product subject to a statute or administrative regulation specifically requiring the manufacturer, importer, distributor, wholesaler, or retailer of a product, or any combination of such entities, to recall the product, or a product voluntarily recalled by a combination of such entities.

4.1.4.1 Corrections and repairs shall be performed by:

(a) a California Contractors State Licensing Board Fire Protection Contractor (C-16) or

(b) a qualified California State Fire Marshal Licensed A (Type 1, Type 2, or Type 3) Concern when the amount of work to be performed does not exceed those limits established by the Contractors State Licensing Laws of the State of California. ~~qualified maintenance personnel or a qualified contractor.~~

4.1.6 Where changes in the occupancy, hazard, water supply, storage commodity, storage arrangement, building modification, or other condition that affects the installation criteria of the system are identified, the owner or occupant shall promptly take steps, such as contacting:

(a) a California Contractors State Licensing Board Fire Protection Contractor (C-16), or
(b) a qualified California State Fire Marshal Licensed A (Type 1, Type 2, or Type 3) Concern, or
(c) a California Board of Professional Engineers and Land Surveyors Licensed Engineer

~~qualified contractor, consultant, or engineer,~~ to evaluate the adequacy of the installed system in order to protect the building or hazard in question.

4.2 Impairments.

Where an impairment to a water-based fire protection system occurs, the procedures outlined in Chapter 14 of this standard shall be followed, including the attachment of a tag to the impaired system.

4.3.5 Subsequent records shall be retained for a period of ~~1 year~~ 5 years after the next inspection, test, or maintenance required by the standard.

Table 5.1 Summary of Sprinkler System Inspection, Testing, and Maintenance

Item	Activity	Frequency	Reference
Gauges (dry, preaction, and deluge systems)	Inspection	Quarterly ~~Weekly/monthly~~	5.2.4.2, 5.2.4.3
Control valves	Inspection	Weekly/monthly	Table 12.1
Alarm devices	Inspection	Quarterly	5.2.6
Gauges (wet pipe systems)	Inspection	Quarterly ~~Monthly~~	5.2.4.1
Hydraulic nameplate	Inspection	Quarterly	5.2.7
Buildings	Inspection	Annually (prior to freezing weather)	5.2.5
Hanger/seismic bracing	Inspection	Quarterly ~~Annually~~	5.2.3
Hanger/seismic bracing in accessible concealed spaces	Inspection	5 Years	5.2.3.3
Pipe and fittings	Inspection	Quarterly ~~Annually~~	5.2.2
Pipe and fittings	Inspection	5 Years	5.2.2.3
Sprinklers	Inspection	Quarterly ~~Annually~~	5.2.1
Sprinklers in accessible concealed spaces	Inspection	5 Years	5.2.1 .1.4
Spare sprinklers	Inspection	Quarterly ~~Annually~~	5.2.1.3
Fire department connections	Inspection	Quarterly	Table 12.1
Valves (all types)	Inspection		Table 12.1
Alarm devices	Test	Annually ~~Quarterly/semiannually~~	5.3.3
Main drain	Test	Annually	Table 12.1
Antifreeze solution	Test	Annually	5.3.4
Gauges	Test	5 years	5.3.2
Sprinklers — extra-high temperature	Test	5 years	5.3.1.1.1.3
Sprinklers — fast response	Test	At 20 years and every 10 years thereafter	5.3.1.1.1.2
Sprinklers	Test	At 50 years and every 10 years thereafter	5.3.1.1.1
Valves (all types)	Maintenance	Annually or as needed	Table 12.1
Obstruction investigation	Maintenance	5 years or as needed	13.2.1, 13.2.2
Low point drains (dry pipe system)	Maintenance	Annually prior to freezing and as needed	12.4.4.3.3

5.2.1.1* Sprinklers installed under an exposed ceiling shall be inspected quarterly from the floor level ~~annually~~. Sprinklers installed in inaccessible concealed spaces shall not be required to be inspected.

5.2.1.1.4* Sprinklers installed in concealed spaces such as above suspended ceilings or in concealed spaces where access is provided by access openings shall ~~not require inspection~~ be inspected at a frequency not to exceed 5 years.

5.2.1.3 The supply of spare sprinklers shall be inspected quarterly ~~annually~~ for the following:

(1) The proper number and type of sprinklers

(2) A sprinkler wrench for each type of sprinkler

5.2.2* Pipe and Fittings. Sprinkler pipe installed under an exposed ceiling shall be inspected quarterly from the floor level ~~annually~~. Sprinkler pipe installed in inaccessible concealed spaces shall not be required to be inspected.

5.2.2.3* Pipe and fittings installed in concealed spaces such as above suspended ceilings or in concealed spaces where access is provided by access openings shall ~~not require inspection~~ be inspected at a frequency not to exceed 5 years.

5.2.3* Hangers and Seismic Braces. Sprinkler pipe hangers and seismic braces installed under an exposed ceiling shall be inspected quarterly from the floor level ~~annually~~. Sprinklers installed in inaccessible concealed spaces shall not be required to be inspected.

5.2.3.3* Hangers and seismic braces installed in concealed spaces such as above suspended ceilings or in concealed spaces where access is provided by access openings shall ~~not require inspection~~ be inspected annually.

5.2.4.1* Gauges on wet pipe sprinkler systems shall be inspected quarterly ~~monthly~~ to ensure that they are in good condition and that normal water supply pressure is being maintained.

5.2.4.2 Gauges on dry, preaction, and deluge systems shall be inspected quarterly ~~weekly~~ to ensure that normal air and water pressures are being maintained.

5.2.4.3 Where air pressure supervision is connected to a constantly attended location, gauges shall be inspected quarterly ~~monthly~~.

5.3.3.1 Water-flow devices including, but not limited to, mechanical water motor gongs and pressure switch type shall be tested annually ~~quarterly~~.

5.3.3.2* Vane-type waterflow devices shall be tested annually ~~semiannually~~.

Table 6.1 Summary of Standpipe and Hose Systems Inspection, Testing, and Maintenance

Item	Activity	Frequency	Reference
Control valves	Inspection	Weekly/monthly	Table 12.1
Pressure regulating devices	Inspection	Quarterly	Table 12.1
Piping	Inspection	Semi-Annually ~~Quarterly~~	6.2.1
Hose connections	Inspection	Semi-Annually ~~Quarterly~~	Table 12.1
Cabinet	Inspection	Semi-Annually ~~Annually~~	NFPA 1962
Hose	Inspection	Semi-Annually ~~Annually~~	NFPA 1962
Hose storage device	Inspection	Semi-Annually ~~Annually~~	NFPA 1962
Alarm device	Test	Semi-Annually ~~Quarterly~~	Table 12.1
Hose nozzle	Test	Annually	NFPA 1962
Hose storage device	Test	5 years ~~Annually~~	NFPA 1962
Hose	Test	5 years/3 years	NFPA 1962
Pressure control valve	Test	5 years	Table 12.1
Pressure reducing valve	Test	5 years	Table 12.1
Hydrostatic test	Test	5 years	6.3.2
Flow test	Test	5 years	6.3.1
Main drain test	Test	Annually	Table 12.1
Hose connections	Maintenance	Annually	Table 6.2.2
Valves (all types)	Maintenance	Annually/as needed	Table 12.1

6.1.2 Impairments. Where the inspection, testing, and maintenance of standpipe and hose systems results or involves a system that is out of service, the procedures outlined in Chapter 14 shall be followed.

6.2.1 Components of standpipe and hose systems shall be visually inspected semi-annually ~~quarterly~~ or as specified in Table 6.1.

6.3.1.3 All systems shall be flow tested and pressure tested at the requirements in effect at the time of the installation. Where such requirements cannot be determined, the Fire Authority Having Jurisdiction shall establish the test requirements.

6.3.1.3.1.1 Where the standpipe is supplied by a fire department connection and a fire pump, the standpipe shall be tested using the fire pump and the fire department connection independently. Where multiple fire department connections are installed, the standpipe shall be tested by using each fire department connection independently.

6.3.1.3.1.2 Where the standpipe is supplied by pumps which are staged in series due to the height of the building and the fire department connection is not capable of supplying standpipes in the high zone, the fire department connection shall be used to supply the high zone pump.

6.3.1.6 Class I and Class III Standpipes not installed in accordance with NFPA 14 shall be tested in accordance with Table 6-3.1.6.

Table 6.3.1.6

Class	Type of Test	Required Flow at Outlet	Required Pressure at Outlet	Hyrdrostatic Test	Duration
I	Air			25 psi	
I	Hydrostatic	N/A	N/A	50 psi + Static Pressure but not less than 150 psi	3 Minutes
I	Flow	100 gpm	Maximum friction loss not to exceed 15 psi	N/A	3 Minutes
III	Flow	500	65	N/A	3 Minutes

6.3.1.7 Class II Standpipes not installed in accordance with NFPA 14 shall be tested in accordance with Table 6.3.1.7.

Table 6.3.1.7

Date of Installation	Required Flow at Outlet	Required Pressure at Outlet
Prior to 1948	20 gpm	8 psi
1948 to 1959	35 gpm	12 psi
1960 to 1979	35 gpm	15 psi
Reference: 1979 Uniform Fire Code, Appendix G		

6.3.1.7.1 Testing of Class II Standpipes installed prior to 1980 which are supplied by gravity tanks or pressure tanks shall include the operation of the automatic filling device.

8.3.4.3 Tests of appropriate environmental pump room space conditions (e.g., heating, ventilation, illumination) shall be made as needed to ensure proper manual or automatic operation of the associated equipment.

Table 9.1 Summary of Water Storage Tank Inspection, Testing, and Maintenance

Item	Activity	Frequency	Reference
Condition of water in tank	Inspection	Monthly/quarterly*	9.2.1
Water temperature	Inspection	Daily/weekly*	9.2.4
Heating system	Inspection	Daily/weekly*	9.2.6.6
Control valves	Inspection	Weekly/monthly	Table 12.1
Water — level	Inspection	Monthly/quarterly	9.2.1
Air pressure	Inspection	Monthly/quarterly	9.2.2
Tank — exterior	Inspection	Quarterly	9.2.5.1
Support structure	Inspection	Quarterly	9.2.5.1
Catwalks and ladders	Inspection	Quarterly	9.2.5.1
Surrounding area	Inspection	Quarterly	9.2.5.2
Hoops and grillage	Inspection	Annually	9.2.5.4
Painted/coated surfaces	Inspection	Annually	9.2.5.5
Expansion joints	Inspection	Annually	9.2.5.3
Interior	Inspection	5 years/3 years	9.2.6
Check valves	Inspection	5 years	Table 12.1
Temperature alarms	Test	Monthly*	9.2.4.2, 9.2.4.3
High temperature limit switches	Test	Monthly*	9.3.4
Water level alarms	Test	Semiannually	9.3.5
Level indicators	Test	5 years	9.3.1
Pressure gauges	Test	5 years	9.3.6
Automatic Filling Device	Test	5 Years	9.3.7
Water level	Maintenance	—	9.4.1
Drain silt	Maintenance	Semiannually	9.4.5
Control valves	Maintenance	Annually	Table 12.1
Embankment-supported coated fabric (ESCF)	Maintenance	—	9.4.6
Check valves	Maintenance	—	12.4.2.2

*Cold weather/heating season only.

9.3.7 Where gravity tanks and pressure tanks are provided with an automatic filling device, such device shall be tested every 5 years to ensure it operates properly.

Table 10.1 Summary of Water Spray Fixed System Inspection, Testing, and Maintenance

Item	Activity	Frequency	Reference
Backflow preventer	Inspection		Chapter 12
Check valves	Inspection		Chapter 12
Control valves	Inspection	Weekly (sealed)	Chapter 12
Control valves	Inspection	Monthly (locked, supervised)	Chapter 12
Deluge valve	Inspection		10.2.2, Chapter 12
Detection systems	Inspection		*NFPA 72*
Detector check valves	Inspection		Chapter 12
Drainage	Inspection	Quarterly	10.2.8
Electric motor	Inspection		10.2.9, Chapter 8
Engine drive	Inspection		10.2.9, Chapter 8
Fire pump	Inspection		10.2.9, Chapter 8
Fittings	Inspection	Quarterly	10.2.4, 10.2.4.1
Fittings (rubber-gasketed)	Inspection	Quarterly	10.2.4.1, A.10.2.4.1
Gravity tanks	Inspection		10.2.10, Chapter 9
Hangers	Inspection	Quarterly	10.2.4.2
Heat (deluge valve house)	Inspection	Daily/weekly	10.2.1.5, Chapter 12
Nozzles	Inspection	Monthly	10.2.1.1, 10.2.1.2, 10.2.1.6, 10.2.5.1, 10.2.5.2
Pipe	Inspection	Quarterly	10.2.1.1, 10.2.1.2, 10.2.4, 10.2.4.1
Pressure tank	Inspection		10.2.10, Chapter 9
Steam driver	Inspection		10.2.9, Chapter 8
Strainers	Inspection	Mfg. instruction	10.2.7
Suction tanks	Inspection		10.2.10, Chapter 9
Supports	Inspection	Quarterly	10.2.1.1, 10.2.1.2, 10.2.4.2
Water supply piping	Inspection		10.2.6.1, 10.2.6.2
UHSWSS — detectors	Inspection	Monthly	10.4.2
UHSWSS — controllers	Inspection	Each shift	10.4.3
UHSWSS — valves	Inspection	Each shift	10.4.4

Backflow preventer	Operational test		Chapter 12
Check valves	Operational test		Chapter 12
Control valves	Operational test	Quarterly	Chapter 12
Deluge valve	Operational test		10.2.2, Chapter 12
Detection systems	Operational test		*NFPA 72*
Detector check valve	Operational test		Chapter 12
Electric motor	Operational test		10.2.9, Chapter 8
Engine drive	Operational test		10.2.9, Chapter 8
Fire pump	Operational test		10.2.9, Chapter 8
Flushing	Operational test	Annually	10.2.1.3, Section 10.3 (flushing of connection to riser, part of annual test)
Gravity tanks	Operational test		10.2.10, Chapter 9
Main drain test	Operational test	Annually ~~Quarterly~~	Chapter 12
Manual release	Operational test	Annually	10.2.1.3, 10.3.6
Nozzles	Operational test	Annually	10.2.1.3, 10.2.1.6, Section 10.3
Pressure tank	Operational test		Section 10.2, Chapter 9
Steam driver	Operational test		10.2.9, Chapter 8
Strainers	Operational test	Annually	10.2.1.3, 10.2.1.7, 10.2.7
Suction tanks	Operational test		10.2.10, Chapter 9
Water-flow alarm	Operational test	Annually ~~Quarterly~~	Chapter 5
Water spray system test	Operational test	Annually	Section 10.3, Chapter 12
Water supply flow test	Operational test		7.3.2
UHSWSS	Operational test	Annually	Section 10.4
Backflow preventer	Maintenance		Chapter 12
Check valves	Maintenance		Chapter 12
Control valves	Maintenance	Annually	10.2.1.4, Chapter 12
Deluge valve	Maintenance		10.2.2, Chapter 12
Detection systems	Maintenance		*NFPA 72*
Detector check valve	Maintenance		Chapter 12
Electric motor	Maintenance		10.2.9, Chapter 8
Engine drive	Maintenance		10.2.9, Chapter 8

Fire pump	Maintenance		10.2.9, Chapter 8
Gravity tanks	Maintenance		10.2.10, Chapter 9
Pressure tank	Maintenance		10.2.6, Chapter 9
Steam driver	Maintenance		10.2.9, Chapter 8
Strainers	Maintenance	Annually	10.2.1.4, 10.2.1.7, 10.2.7
Strainers (baskets/screen)	Maintenance	5 years	10.2.1.4, 10.2.1.8, A.10.2.7
Suction tanks	Maintenance		10.2.10, Chapter 9
Water spray system	Maintenance	Annually	10.2.1.4, Chapter 12

Table 11.1 Summary of Foam-Water Sprinkler System Inspection, Testing, and Maintenance

System/Component	Activity	Frequency	Reference
Discharge device location (sprinkler)	Inspection	Annually	11.2.5
Discharge device location (spray nozzle)	Inspection	Monthly	11.2.5
Discharge device position (sprinkler)	Inspection	Annually	11.2.5
Discharge device position (spray nozzle)	Inspection	Monthly	11.2.5
Foam concentrate strainer(s)	Inspection	Quarterly	11.2.7.2
Drainage in system area	Inspection	Quarterly	11.2.8
Proportioning system(s) — all	Inspection	Quarterly ~~Monthly~~	11.2.9
Pipe corrosion	Inspection	Quarterly	11.2.3
Pipe damage	Inspection	Quarterly	11.2.3
Fittings corrosion	Inspection	Quarterly	11.2.3
Fittings damage	Inspection	Quarterly	11.2.3
Hangers/supports	Inspection	Quarterly	11.2.4
Water supply tank(s)	Inspection		Chapter 9
Fire pump(s)	Inspection		Chapter 8
Water supply piping	Inspection		11.2.6.1
Control valve(s)	Inspection	Weekly/monthly	—
Deluge/preaction valve(s)	Inspection		11.2.1, Chapter 12
Detection system	Inspection	See *NFPA 72*	11.2.2
Discharge device location	Test	Annually	11.3.3.6
Discharge device position	Test	Annually	11.3.3.6
Discharge device obstruction	Test	Annually	11.3.3.6

Foam concentrate strainer(s)	Test	Annually	11.2.7.2
Proportioning system(s) — all	Test	Annually	11.2.9
Complete foam-water system(s)	Test	Annually	11.3.3
Foam-water solution	Test	Annually	11.3.6
Manual actuation device(s)	Test	Annually	11.3.5
Backflow preventer(s)	Test	Annually	Chapter 12
Fire pump(s)	Test	See Chapter 8	—
Water supply piping	Test	Annually	Chapter 10
Control valve(s)	Test	See Chapter 12	—
Strainer(s) — mainline	Test	See Chapter 10	11.2.7.1
Deluge/preaction valve(s)	Test	See Chapter 12	11.2.1
Detection system	Test	See *NFPA 72*	11.2.2
Backflow preventer(s)	Test	See Chapter 12	—
Water supply tank(s)	Test	See Chapter 9	—
Water supply flow test	Test	See Chapter 4	11.2.6
Foam concentrate pump operation	Maintenance	Monthly	11.4.6(A), 11.4.7(A)
Foam concentrate strainer(s)	Maintenance	Quarterly	Section 11.4
Foam concentrate samples	Maintenance	Annually	11.2.10
Proportioning system(s) standard pressure type			
Ball drip (automatic type) drain valves	Maintenance	5 years	11.4.3(A)
Foam concentrate tank — drain and flush	Maintenance	10 years	11.4.3(B)
Corrosion and hydrostatic test	Maintenance	10 years	11.4.3(C)
Bladder tank type			
Sight glass	Maintenance	10 years	11.4.4(A)
Foam concentrate tank — hydrostatic test	Maintenance	10 years	11.4.4(B)
Line type			
Foam concentrate tank — corrosion and pickup pipes	Maintenance	10 years	11.4.5(A)
Foam concentrate tank — drain and flush	Maintenance	10 years	11.4.5(B)
Standard balanced pressure type			
Foam concentrate pump(s)	Maintenance	5 years *(see Note)*	11.4.6(B)
Balancing valve diaphragm	Maintenance	5 years	11.4.6(C)
Foam concentrate tank	Maintenance	10 years	11.4.6(D)
In-line balanced pressure type			
Foam concentrate pump(s)	Maintenance	5 years *(see Note)*	11.4.7(B)

Balancing valve diaphragm	Maintenance	5 years	11.4.7(C)
Foam concentrate tank	Maintenance	10 years	11.4.7(D)
Pressure vacuum vents	Maintenance	5 years	11.4.8
Water supply tank(s)	Maintenance	See Chapter 9	—
Fire pump(s)	Maintenance	See Chapter 8	—
Water supply	Maintenance	Annually	11.2.6.1
Backflow preventer(s)	Maintenance	See Chapter 12	—
Detector check valve(s)	Maintenance	See Chapter 12	—
Check valve(s)	Maintenance	See Chapter 12	—
Control valve(s)	Maintenance	See Chapter 12	—
Deluge/preaction valves	Maintenance	See Chapter 12	11.2.1
Strainer(s) — mainline	Maintenance	5 years (See Chapter 10)	—
Detection system	Maintenance	See *NFPA 72*	11.2.2

Note: Also, refer to manufacturer's instructions and frequency. Maintenance intervals other than preventive maintenance are not provided, as they depend on the results of the visual inspections and operational tests. For foam-water systems in aircraft hangars, refer to the inspection, test, and maintenance requirements of NFPA 409, *Standard on Aircraft Hangars*, Table 6.1.1.

Table 12.1 Summary of Valves, Valve Components, and Trim Inspection, Testing, and Maintenance

Item	Activity	Frequency	Reference
Control Valves			
Sealed	Inspection	Quarterly ~~Weekly~~	12.3.2.1
Locked	Inspection	Quarterly ~~Monthly~~	12.3.2.1.1
Tamper switches	Inspection	Quarterly ~~Monthly~~	12.3.2.1.1
Alarm Valves			
Exterior	Inspection	Quarterly ~~Monthly~~	12.4.1.1
Interior	Inspection	5 years	12.4.1.2
Strainers, filters, orifices	Inspection	5 years	12.4.1.2
Check Valves			
Interior	Inspection	5 years	12.4.2.1
Preaction/Deluge Valves			
Enclosure (during cold weather)	Inspection	Daily/weekly	12.4.3.1
Exterior	Inspection	Quarterly ~~Monthly~~	12.4.3.1.6
Interior	Inspection	Annually/5 years	12.4.3.1.7
Strainers, filters, orifices	Inspection	5 years	12.4.3.1.8
Dry Pipe Valves/ Quick-Opening Devices			
Enclosure (during cold weather)	Inspection	Daily/weekly	12.4.4.1.1

Exterior	Inspection	Quarterly ~~Monthly~~	12.4.4.1.4
Interior	Inspection	Annually	12.4.4.1.5
Strainers, filters, orifices	Inspection	5 years	12.4.4.1.6
Pressure Reducing and Relief Valves			
Sprinkler systems	Inspection	Quarterly	12.5.1.1
Hose connections	Inspection	Quarterly	12.5.2.1
Hose racks	Inspection	Quarterly	12.5.3.1
Fire pumps			
Casing relief valves	Inspection	Weekly	12.5.6.1, 12.5.6.1.1
Pressure relief valves	Inspection	Weekly	12.5.6.2, 12.5.6.2.1
Backflow Prevention Assemblies			
Reduced pressure	Inspection	Quarterly ~~Weekly/ Monthly~~	12.6.1
Reduced pressure detectors	Inspection	Quarterly ~~Weekly/ Monthly~~	12.6.1
Fire Department Connections	Inspection	Quarterly	12.7.1
Main Drains	Test	Annually ~~Annually/quarterly~~	12.2.6, 12.2.6.1, 12.3.3.4
Water-Flow Alarms	Test	Annually ~~Quarterly~~	12.2.7
Control Valves			
Position	Test	Annually	12.3.3.1
Operation	Test	Annually	12.3.3.1
Supervisory	Test	Annually ~~Semiannually~~	12.3.3.5
Preaction/Deluge Valves			
Priming water	Test	Annually ~~Quarterly~~	12.4.3.2.1
Low air pressure alarms	Test	Annually ~~Quarterly~~	12.4.3.2.10
Full flow	Test	Annually	12.4.3.2.2
Dry Pipe Valves/ Quick-Opening Devices			
Priming water	Test	Annually ~~Quarterly~~	12.4.4.2.1
Low air pressure alarm	Test	Annually ~~Quarterly~~	12.4.4.2.6
Quick-opening devices	Test	Annually ~~Quarterly~~	12.4.4.2.4
Trip test	Test	Annually	12.4.4.2.2
Full flow trip test	Test	3 years	12.4.4.2.2.2
Pressure Reducing and Relief Valves			
Sprinkler systems	Test	5 years	12.5.1.2
Circulation relief	Test	Annually	12.5.6.1.2

Pressure relief valves	Test	Annually	12.5.6.2.2
Hose connections	Test	5 years	12.5.2.2
Hose racks	Test	5 years	12.5.3.2
Backflow Prevention Assemblies	Test	Annually	12.6.2
Fire Department Connection	Test	5 years	12.7.4
Control Valves	Maintenance	Annually	12.3.4
Preaction/Deluge Valves	Maintenance	Annually	12.4.3.3.2
Dry Pipe Valves/ Quick-Opening Devices	Maintenance	Annually	12.4.4.3.2

12.2.6.1 Systems where the sole water supply is through a backflow preventer and/or pressure reducing valves, the main drain test of at least one system downstream of the device shall be conducted on a Annually ~~quarterly~~ basis.

12.2.7 Water-Flow Alarm. All water-flow alarms shall be tested a Annually ~~quarterly~~ in accordance with the manufacturer's instructions.

12.3.2.1 All valves shall be inspected quarterly ~~weekly~~.

12.3.2.1.1 Valves secured with locks or supervised in accordance with applicable NFPA standards shall be permitted to be inspected quarterly ~~monthly~~.

12.3.3.5.1 Valve supervisory switches shall be tested a Annually ~~semiannually~~.

12.4.1.1* Alarm valves shall be externally inspected quarterly ~~monthly~~ and shall verify the following:

(1) The gauges indicate normal supply water pressure is being maintained.

(2) The valve is free of physical damage.

(3) All valves are in the appropriate open or closed position.

(4) The retarding chamber or alarm drains are not leaking.

12.4.3.1.3 Gauges shall be inspected quarterly ~~weekly~~.

12.4.3.1.4 The gauge monitoring the preaction system supervisory air pressure, if provided, shall be inspected quarterly ~~monthly~~ to verify that it indicates that normal pressure is being maintained.

12.4.3.1.5 The gauge monitoring the detection system pressure, if provided, shall be tested annually ~~monthly~~ to verify that it indicates that normal pressure is being maintained.

12.4.3.1.6 The preaction or deluge valve shall be externally inspected quarterly ~~monthly~~ to verify the following:

(1) The valve is free from physical damage.

(2) All trim valves are in the appropriate open or closed position.

(3) The valve seat is not leaking.

(4) Electrical components are in service.

12.4.3.2.1* The priming water level in supervised preaction systems shall be tested annually ~~quarterly~~ for compliance with the manufacturer's instructions.

12.4.3.2.10 Low air pressure alarms, if provided, shall be tested annually ~~quarterly~~ in accordance with the manufacturer's instructions.

12.4.4.1.4 The dry pipe valve shall be externally inspected quarterly ~~monthly~~ to verify the following:

(1) The valve is free of physical damage.

(2) All trim valves are in the appropriate open or closed position.

(3) The intermediate chamber is not leaking.

12.4.4.2.1* The priming water level shall be tested annually ~~quarterly~~.

12.4.4.2.4* Quick-opening devices, if provided, shall be tested annually ~~quarterly~~.

12.4.4.2.6 Low air pressure alarms, if provided, shall be tested annually ~~quarterly~~ in accordance with the manufacturer's instructions.

12.6.1.1 The double check assembly (DCA) valves and double check detector assembly (DCDA) valve shall be inspected quarterly ~~weekly~~ to ensure that the OS&Y isolation valves are in the normal open position.

12.6.1.1.1 Valves secured with locks or electrically supervised in accordance with applicable NFPA standards shall be inspected quarterly ~~monthly~~.

12.6.1.2* Reduced pressure assemblies (RPA) and reduced pressure detector assemblies (RPDA) shall be inspected quarterly ~~weekly~~ to ensure that the differential-sensing valve relief port is not continuously discharging and the OS&Y isolation valves are in the normal open position.

12.6.1.2.1 Valves secured with locks or electrically supervised in accordance with applicable NFPA standards shall be inspected quarterly ~~monthly~~.

12.7.4* All fire department connections shall be backflushed at full flow at a frequency not to exceed 5 years.

Proposed changes to NFPA 25, Annex A

A.5.2.1.1.4 ~~Examples include some floor/ceiling or roof/ceiling assemblies, areas under theater stages, pipe chases, and other inaccessible areas.~~ Suspended ceilings are those ceilings utilizing ceiling tiles installed on a grid where the ceiling tiles can be removed. This includes ceiling tiles held in place with hold-down clips as in fire rated ceiling construction. This does not include a suspended gypsum wallboard ceiling which is not provided with an access opening.

Certain concealed spaces are required by the California Building Code to be provided with access openings. Such concealed spaces include attics, mansard spaces, under-floor spaces, under stages, under platforms or decks, and similar accessible spaces.

Accessible concealed spaces are provided with access openings for maintenance of mechanical and electrical services. Although the general public or building occupants do not normally access these spaces, maintenance personnel and contractors do access these spaces. While servicing mechanical or electrical equipment these people may damage or create an obstruction to sprinklers. In addition, during the normal life of a building, roof insulating materials may fall and cover a sprinkler, thereby obstructing the sprinkler in terms of insulating the thermal response element of the sprinkler and in terms of obstructing the spray pattern.

A.5.2.2.3 ~~Examples include some floor/ceiling or roof/ceiling assemblies, areas under theater stages, pipe chases, and other inaccessible areas.~~ Suspended ceilings are those ceilings utilizing ceiling tiles installed on a grid where the ceiling tiles can be removed. This includes ceiling tiles held in place with hold-down clips as used in fire rated ceiling construction.

Certain concealed spaces are required by the California Building Code to be provided with access openings. Such concealed spaces include attics, mansard spaces, under-floor spaces, under stages, under platforms or decks, and similar accessible spaces.

Accessible concealed spaces are provided with access openings for maintenance of mechanical and electrical services. Although the general public or building occupants do not normally access these spaces, maintenance personnel and contractors do access these spaces. While servicing mechanical or electrical equipment these people may damage pipe or fittings.

A.5.2.3.3 ~~Examples include some floor/ceiling or roof/ceiling assemblies, areas under theater stages, pipe chases, and other inaccessible areas.~~ Suspended ceilings are those ceilings utilizing ceiling tiles installed on a grid where the ceiling tiles can be removed. This includes ceiling tiles held in place with hold-down clips as in fire rated ceiling construction.

Certain concealed spaces are required by the California Building Code to be provided with access openings. Such concealed spaces include attics, mansard spaces, under-floor spaces, under stages, under platforms or decks, and similar accessible spaces.

Accessible concealed spaces are provided with access openings for maintenance of mechanical and electrical services. Although the general public or building occupants do not normally access these spaces, maintenance personnel and contractors do access these spaces. While servicing mechanical or electrical equipment these people may damage hangers or seismic bracing.

A.12.7.4 The fire department connection shall be tested by backflushing through the inlets. The fire department connection check valve shall be either (1) removed and replaced with a spool piece, or (2) the check valve shall be replaced in the reversed position, or (3) the clapper shall be removed. The check valve clapper shall be inspected for proper operation. If the clapper does not move freely, it shall be repaired or replaced.

The fire department connection shall be backflushed at full flow. Where there is potential for damage to the building and grounds, hoses may be used to divert the water flow.

A hose having the same diameter as the fire department inlet shall be attached to each inlet. The maximum length of the hose shall be 50 feet. Where a greater length is needed, the diameter of the hose shall be increased one nominal diameter unless it can be determined that the flow rate is at least equal to the system demand.

At the completion of the backflush test, the check valve or clapper shall be reinstalled in the proper orientation. All control valves shall be returned to their normal position. The fire department connection shall be inspected to ensure the check valve is liquid tight.

.